

REMARKS

Claims 14-29 are pending in this application. Prosecution in this matter was reopened following the filing of an appeal brief on 12/18/2009. The Examiner has entered the amendment filed on 7/6/2009.

By this Amendment, claims 15, 18, 21, 26, 27 and 28 have been canceled. The features of claims 15, 18 and 27 have been incorporated into claim 14. Claim 14 has also been amended to recite that component b) is a copolymer of ethylene and 1-octene having 10 to 30 mol% of C₈ derived units, support for which can be found at page 4, lines 15-26, and that component a) is produced with a Ziegler Natta catalyst, support for which can be found at page 2, lines 28-31. Claim 30 is new, support for which can be found at page 18, lines 25-27. Entry and consideration of these amendments is earnestly requested in that it does not introduce new matter.

Claim Rejections

Rejections Under 35 U.S.C. § 103

A. Response to rejection of claims 14-29 under 35 U.S.C. §103(a) as being unpatentable over Pelliconi et al. in view of Winter et al.

In response to the rejection of claims 14-29 under 35 U.S.C. 103(a) as being unpatentable over International Publication No. WO 03/051984 of Pelliconi et al. ("Pelliconi") in view of U.S. Patent No. 5,145,819 of Winter et al. ("Winter"), Applicants respectfully submit that the reference does not teach all the elements of the present claims and that a *prima facie* case of Obviousness has not been made out, and traverse the Rejection.

With respect to a rejection under 103(a), the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under §103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness. Accordingly, for the Examiner to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. See MPEP §2143.

Finally, all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. (BNA) 580 (C.C.P.A. 1974).

The current claims recite a composition containing components a) to c), where component a) is a particularly specified material produced using a Ziegler Natta catalyst, and components b) and c) are particularly specified materials produced with a metallocene type catalyst. The Examiner has pointed to page 5, line 26 to page 6, line 1 of Pelliconi as allegedly teaching bridged bis-indenyl metallocene catalysts, as disclosed in Winter. However, Pelliconi also discloses stereospecific Ziegler-Natta catalyst (page 3, lines 25-26) and constrained-geometry catalysts (page 5, lines 30-32). The Examiner then contends that one skilled in the art would combine Pelliconi's polymer component structure with Winter's metallocene catalysts to arrive at the current claims.

However, to arrive at this conclusion, the Examiner is necessarily contending that one skilled in the art would:

1. Choose out of Pelliconi the teaching of a Ziegler-Natta produced propylene homopolymer or copolymer for component a) out of Ziegler-Natta, metallocene, or constrained geometry catalyst-produced components; and
2. Conclude that Pelliconi also teaches simultaneously producing components b) and c) from a metallocene catalyst instead of a Ziegler Natta catalyst (as was already assumed to produce component a)); or for that matter a constrained-geometry catalyst. This would be done by one skilled in the art despite all of Pelliconi's working examples illustrating polymer compositions made using only Ziegler-Natta catalysts; i.e., no metallocene materials were produced at all, much less a mixed metallocene/Ziegler Natta system; and
3. Choose 1-octene as the comonomer with ethylene for component b) out of a selection of C₄-C₁₀ α -olefins. This would be done by one skilled in the art despite all of Pelliconi's working examples illustrating C₄ as the comonomer with ethylene, and C₄ being the preferred comonomer; and
4. Choose a 1-octene comonomer level of 10-30 mol% for component b); and
5. Choose a particular selection of metallocene catalysts out of Winter.

The Examiner contends in the Office Action:

Barring a showing of factual evidence demonstrating unexpected results, it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use any of the catalysts disclosed by Pelliconi as suitable for use in preparing components of the prior art composition.

In view of the breadth of catalyst choices in Pelliconi and the use of Pelliconi as allegedly teaching combinations of the various catalysts to produce the three components in the polymer composition, the Examiner's contention that it would have been obvious to use "any" of the disclosed catalysts (Ziegler Natta or metallocene or constrained geometry --- or combinations thereof to produce various polymer components) demonstrates an Obviousness Standard in this matter which is clearly not that of the Supreme Court, which requires a finding of:

finite number of identified, predictable solutions *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

or the Federal Circuit which requires

a finite (and small in the context of the art) number of options easily traversed to show obviousness." *Ortho-McNeil Pharmaceutical, Inc. v. Mylan Laboratories, Inc.*, 520 F.3d 1358, 1364 (Fed. Cir. 2008).

Certainly, the modification of Pelliconi to arrive at the present claims proposed by the Examiner represents neither a finite number of identified and predictable solutions, nor a small number of options easily traversed. Therefore, modification of Pelliconi to arrive at the present claims, as suggested by the Examiner clearly does not represent a *prima facie* case of Obviousness.


However, even if a *prima facie* case of Obviousness had been made out by the Examiner, the specification sets forth experimental data that represent unexpected results to overcome such a case. In this regard, the currently claimed propylene polymer compositions comprise a better impact-stiffness balance since component (a), the propylene homopolymer or copolymer present from 50% to 90% by weight comprises, at the very least, a polydispersity index greater than 3.5. This is exemplified by Examples 2, 4, and 5 versus Comparative Examples 1 and 3 in Table 3 in

Applicants' specification. In particular, Comparative Example 1 comprises 70% of component a-1 as component (a), which has a polydispersity index less than 3.5 (i.e., 2.4), while Example 2 comprises 70% of component a-2 as component (a), which has a polydispersity index greater than 3.5 (i.e., 3.8). Accordingly, Example 2 has much higher Young modulus, chord modulus, Izod at -30 °C, and Izod at -40 °C values than Comparative Example 1. Similarly, unexpected results can be seen with Comparative Example 3 with respect to Examples 4 and 5, albeit with 80% of their respective component (a) present. However, Pelliconi and Winter are both completely silent in this regard (i.e., that the impact-stiffness of propylene polymer compositions can be improved by using 50% to 90% by weight of propylene homo- and co- polymers having a polydispersity index greater than 3.5). In fact, Pelliconi mainly deals with producing polyolefin compositions with improved optical and whitening properties, while Winter mainly relates to 2-substituted bisindenyl metallocenes.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this Amendment, Applicants' attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

Respectfully submitted,


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I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 12, 2010.


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Date of Signature

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